MACON & JOAN BROCK
VIRGINIA HEALTH SCIENCES
AT OLD DOMINION UNIVERSITY

Reproductive Clinical Science-Embryology & Andrology Master's Program Student Handbook

2025-2026

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WELCOME

The Program Director, Faculty, Technical, and administrative support staff welcome you to the Master's Program in Reproductive Clinical Science- Embryology & Andrology at Macon & Joan Brock Virginia Health Sciences at Old Dominion University and the Jones Institute for Reproductive Medicine, now Shady Grove Fertility. This student handbook contains information and policies and procedures for Macon & Joan Brock Virginia Health Sciences at Old Dominion University, the School of Health Professions, and is your guide to the specific Reproductive Clinical Science Master's of Science (RCS MS) program policies and procedures.

BRIEF PROGRAM HISTORY

Macon & Joan Brock Virginia Health Sciences at Old Dominion University, through its prestigious Howard and Georgeanna Jones Institute for Reproductive Medicine, now Shady Grove Fertility, is a pioneer in assisted reproductive technology (ART). In 1981, the first in vitro fertilization baby in the USA was born through the efforts of this premier fertility center. Now, it is widely acknowledged to be an international leader in clinical and scientific research in ART and has trained many prominent physicians and scientists.

The Brock Virginia Health Sciences campus holds the largest biomedical research institution in southeastern Virginia as well as the area's largest medical center complex. In addition to the training of medical and health professions students, this institution has numerous research institutes and clinical programs that interface with the basic science departments. The integration of clinical and basic sciences is an important component of the biomedical sciences graduate programs.

The Reproductive Clinical Science Master's Program is administered from within the School of Health Professions. The Program Director is Liang Yu, Ph.D.

PURPOSE

MISSION STATEMENT

The mission of the Reproductive Clinical Science- Embryology & Andrology Master's Program is to provide an educational program dedicated to academic excellence that provides the essential knowledge and skills to produce competent clinical embryologists and andrologists working in laboratories dedicated to the management of infertility, collectively called assisted reproductive technology (ART).

GOALS AND OBJECTIVES

The M.S. in Reproductive Clinical Science- Embryology & Andrology Program is designed for clinical embryologists, andrologists, physicians, and others involved in the practice of ART. The program goal is to provide multidisciplinary graduate-level education and training in current technology to meet the ever-changing demands in clinical and research aspects of assisted reproductive medicine, embryology, and andrology. This program was designed to create a bridge between clinical, laboratory, and molecular reproductive medicine and the basic sciences as well as evaluate embryology laboratory and andrology laboratory skills and offer training in basic and advanced reproductive laboratory techniques.

To accomplish the program goals, the program has established the following objectives:

- Demonstrate mastery of the molecular reproductive science field including: gamete biology, reproductive medicine techniques (insemination, fertilization, and transfer), semen analysis, embryo development, and cryopreservation.
- Command interdisciplinary scientific knowledge and skills including embryology, andrology, endocrinology, physiology, genetics, and biostatistics, which enables them to respond to industry trends.
- Be able to apply scientific methodology to solve complex research problems received from industry or from research institutions that meet the ever-changing demands of assisted reproductive medicine: embryology and andrology.

- Command interdisciplinary scientific knowledge and skills related to embryology, andrology, endocrinology, physiology, genetics, and biostatistics, which enables them to respond to industry trends.
- Have gained various social competencies (critical thinking, team and communication abilities, cultural humility, etc.) which prepare them for the challenges of employment and leadership.

ACCREDITATION

Our institution is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award the Doctor of Medicine degree, Masters' degrees, Doctoral degrees, and Certificates. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097 or call 404-679-4500 for questions about the accreditation of Macon & Joan Brock Virginia Health Sciences at Old Dominion University.

KEY PROGRAM CONTACT INFORMATION

The Reproductive Clinical Science Master's Program will be administered according to the policies established in the Program Handbook. The program will be administered by the Program Director, the Associate Director, the Chairs of the Curriculum and Admissions Committee, and the Dean for the School of Health Professions.

Liang Yu, Ph.D. Program Director, Associate Professor	Jones Institute, Room 425 651 Colley Avenue | Norfolk, VA 23507	757-446-8421	YuL@odu.edu
Tricia Lazatin Program Coordinator	Lester Hall, Suite 315 651 Colley Avenue Norfolk, VA 23507	757.446.7935	lazatitb@odu.edu
Macon & Joan Brock Virginia Health Sciences Reproductive Clinical Science Program	P.O. Box 1980 Norfolk, VA 23501	757.446.7935	VHS-RCSCourses@odu.edu

PROGRAM FACULTY

The graduate faculty of the Reproductive Clinical Science Master's Program will be certified in accordance with the general criteria contained in the policies for the certification of graduate faculty of Macon & Joan Brock Virginia Health Sciences at Old Dominion University. These criteria include research, teaching performance at the advanced level, efforts to secure funding, and attainment of necessary graduate degrees.

Full-Time RCS Faculty	
Alfred Z. Abuhamad, MD	Professor & Chairman/Department of Obstetrics and Gynecology
Minglei Bian, Ph.D.	Assistant Professor/School of Health Professions
Silvina Bocca, MD, Ph.D., HCLD (ABB)	Professor/Department of Obstetrics and Gynecology
Frank J. Castora, Ph.D.	Professor/Department of Physiological Sciences
Eva Forgacs-Lonart, Ph.D.	Associate Professor/Department of Physiological Sciences
Gyorgy Lonart, Ph.D.	Professor/Department of Pathology & Anatomy
Mahmood S. Morshedi, Ph.D., HCLD (ABB), CTBS	Professor/Department of Obstetrics and Gynecology and School of Health Professions
Jacob Shuman, MS	Instructor/ School of Health Professions
Laurel Stadtmauer, MD, Ph.D.	Professor/Department of Obstetrics and Gynecology
Liang Yu, Ph.D.	Associate Professor / School of Health Professions/Department of Obstetrics and Gynecology

Adjunct and Community Faculty	
Marlane Angle, Ph.D., HCLD (ABB)	IVF Laboratory Director, Laurel Fertility Center, San Francisco, CA
Susan Crockin, J.D.	Scholar, The O'Neill Institute for National and Global Health Law Georgetown U. Law Center Affiliate faculty in residence, Kennedy Institute of Ethics Georgetown University, Washington, DC
Gary Harton, Ph.D., TS (ABB)	Director Market Development Genetics Testing PerkinElmer Biotech
April Pace, DHSc	Instructor
Kellie Robinson, EDD	Teacher
Alicia Broussard, PhD, HCLD (ABB)	IVF Laboratory Director, Generation Next Fertility
Eva Schenkman, Ph.D., HCLD (ABB)	IVF Laboratory Director, ARTLAB
Hang Yin, Ph.D., HCLD (ABB)	Assistant Professor, Center for Reproductive Medicine and Infertility, Cornell University, New York, NY
Yueqin Zhao, Ph.D.	Mathematical Statistician, FDA, Silver Spring, MD

TECHNICAL STANDARDS

The abilities and skills candidates and students must possess in order to complete the education and training associated with the Master's Program in Reproductive Clinical Science are referred to as "Technical Standards." These abilities and skills are essential for clinical Laboratory practice as an Embryologist and/or Andrologist.

: Observation Skills Technical Standard

: Demonstrate sufficient attention and accuracy in observation skills (visual, auditory, and tactile) in the lecture hall, laboratory, and/or online settings. Indicators include but are not limited to accurate visualization and discrimination of text, numbers, patterns, graphic illustrations, and other imaging texts.

2.0 : Communication Skills Technical Standard

2.1 : Demonstrate effective communication skills with health care professionals, and with people of varying cultures, ethnicities, and personalities.

2.2 : Indicators include, but are not limited to, these examples:

a. Clear, efficient, and intelligible articulation of spoken English language.
b. Legible, efficient, and intelligible written English language.
c. Accurate and efficient English language reading skills.
d. Accurate and efficient, expressive, and receptive communication skills.
e. Ability to accurately follow directions (oral and written).

3.0 : Critical Reasoning Skills Technical Standard

3.1 : Demonstrate critical reasoning skills, including, but not limited to, intellectual, conceptual, integrative, and quantitative abilities.

3.2 : Indicators include, but are not limited to, these examples:

a. Demonstrate ability to measure, calculate, reason, analyze, integrate, and synthesize information.
b. Demonstrate ability to acquire, retain, and apply new and learned information.

4.0 : Motor and Sensory Function Technical Standard

4.1 : Demonstrate sufficient motor and sensory function to perform typical clinical laboratory duties.

4.02 : Indicators include, but are not limited to, these examples:

a. Functional and sufficient sensory capacity (visual, auditory, and tactile) to use laboratory equipment and perform procedures.
b. Execute motor movements that demonstrate safety and efficiency in the various learning settings (i.e., classroom, online, and laboratories).
c. Physical stamina sufficient to complete the online didactic and some laboratory study, which will include prolonged periods of sitting.

5.0 : Behavioral and Social Attributes Technical Standard

5.1 : Demonstrate the behavioral and social attributes vital to participation in a professional program and service as a practicing laboratory professional.

5.2 : Indicators include, but are not limited to, these examples:

a. Possess the emotional health required for full utilization of mental faculties (judgment, orientation, affect, and cognition).
b. Ability to develop mature and effective professional relationships with faculty, students, patients, the public, and other members of the health care team.
c. Possess personal qualities that facilitate effective therapeutic interactions (compassion, empathy, integrity, honesty, benevolence, confidentiality).
d. Demonstrate impartial motives, attitudes, and values in roles, functions, and relationships.
e. Ability to monitor and react appropriately to one's own emotional needs and responses.
f. Display appropriate flexibility and adaptability in the face of stress or uncertainty associated with clinical encounters and clinical environments.
g. Compliance with standards, policies, and practices set forth in the Macon & Joan Brock Virginia Health Sciences at Old Dominion University Student Handbook and the Program Handbook.

REGISTRATION

COURSE REGISTRATION

Students will register for courses six weeks prior to the start of a new semester. Go to MyPortal.evms.edu to log in using your EVMS/ODU credentials, then click on the MySIS link. Several students have reported that the MySIS link was not found on the portal and if this is the case for you, please use the following link: https://mysis.evms.edu/Once at the MySIS login page, you will need to enter your ODU credentials to access the system. *Helpful hint: You just need to use the part of your username that comes before the @odu.edu. For example, Jordan Foley's credentials are FoleyJ@odu.edu, so he would enter FoleyJ for his username and then the password for this account.*

Once you are logged in, you will notice that your account has a HOLD in place. This HOLD prevents you from registering for courses until you review and acknowledge the items listed in the My Documents tab. Go to My Documents and open the Document Center. There, you will find:

a. AM – Technical Standards for your program

b. SA – Financial Acknowledgement

c. AD – Bio Sig

Select the document you want to review and the Click Here link. A new window will open with the Technical Standards and Financial Acknowledgement. These documents are linked so that the system can move you from one to the next. A new window will open to display the document. Once you have read it, close the window and you will be returned to the acknowledgment screen. To acknowledge the document, check the box indicating you are digitally signing, then click NEXT and you will move to the next document on the list. Please note that each of the forms works in the same way.

Once you have completed the Technical Standards and Financial Acknowledgement, you will receive a confirmation message. You may then close the confirmation window and return to My Documents/Document Center, refresh your screen and note that you will have another document to review and acknowledge. Select the Bio Sig document to review and acknowledge. You will get another page to confirm your submission.

Close this page and you will be returned to your Document Center. Refresh your screen again and you should see that all four (4) of the required documents have dropped off the list and your hold has been released.

Navigate to Academics, Registration where you will see the program(s) in which you are currently enrolled. You will need to select the term your respective courses are in. Once the term is selected, click 'Register' to see the appropriate courses. You can either search for a course in the top box of the screen or move down to the middle of the screen and select from the courses available for you.

To select a course, click ADD on the left-hand side, and the course will move under the Selected Courses area. Once you have all the courses you want in the Selected Courses area, click Register/Drop in the upper right-hand corner. *When registering for your course(s), please make sure to register only for the courses listed for the summer term in your approved academic plan.* The screen will refresh with all your selected courses.

To complete your registration, you must click Register/Drop in the lower right-hand corner of the screen. Your screen will refresh with your course schedule displayed at the top. The attendance and withdrawal policy will be visible in the middle of the screen.

If you should need assistance, you may contact the following

departments:

For Login Problems

Network Information Center Help

Desk ithelp@odu.edu

For questions regarding holds, documents, registration once you are in the

Portal

Registrar

VHS-registrar@odu.edu

When contacting the Registrar's Office via email please put 'Registration' in the email subject line.

You may also call the Registrar's office during normal business hours (8:30 a.m. – 4:30 p.m.) at 757.446.5805, or additionally at 757.446.5890 (8:30 a.m.-4:30 p.m.) on Tuesdays and Thursdays.

When sending an email, please be as descriptive as possible. The more information you provide, the easier it will be for staff to understand what you are experiencing. This is especially important when you are experiencing technical difficulties. Screenshots are very helpful, as well as the URL.

STUDENT FINANCES

The Brock Virginia Health Sciences Financial Services office will email an invoice one month prior to the start of each semester. Your first invoice will include tuition and student fees less your acceptance deposit. Individual student bills can be viewed online on the student portal and then the link below will become accessible. Please click read the student finance policy:
https://www.evms.edu/media/evms_private_media_restricted/all_portal/departments_/financial_services/policies_amp_proced ures/Student_Accounts_Receivable_Policy_(BOV_Approved_10SEPT2019).pdf

PAYMENTS

Tuition payments for the Reproductive Clinical Science Master's Program must be paid by the first day of each semester, based on the total number of credit hours for which a student has enrolled and is subject to change at any time. Please contact the Finance Office at 757-446-6063 or by email AR@evms.edu if you do not receive a tuition invoice.

TUITION STATEMENTS

You can access your financial statements at any time online using the student portal . If you have any questions or do not receive an invoice, please contact the Accounts Receivable Office at 757-446-6063 or by email to mailto:AR@evms.edu. If you elect to withdraw from courses at Macon & Joan Brock Virginia Health Sciences at Old Dominion University or from the program that you are enrolled in, you must first contact your program office, yul@odu.edu, then the registrar's office, VHS-registrar@odu.edu, to obtain the forms to fill out and sign, and send to your program for their signatures. You must fill out the correct forms and get them turned in promptly even if it is before the semester starts. If you have enrolled in courses, you will be charged for them. Please contact the Accounts Receivable Office if you have any questions about this policy AR@evms.edu.

FINANCIAL AID

To receive financial aid in the form of student loans you must be registered for at least six (6) credit hours per spring and fall semesters and 3 credit hours in the summer semester. Sources of financial aid are available to the Reproductive Clinical Science Master's Program students from the Financial Aid Office at Macon & Joan Brock Virginia Health Sciences at Old Dominion University: https://www.evms.edu/education/financial_aid/. Financial aid officers at Brock Virginia Health Sciences are approved for processing various Federal and State student loan applications. Regulations and availability of these loans change from year to year; therefore, current information and applications should be sought from the institutional financial aid officers. Students should understand that any awards or loans are given only to full-time students who continue in good academic standing. Financial aid information can be obtained by contacting the Financial Aid Office: 757-446-5804 or email VHS-finaid@odu.edu.

FINANCIAL AID AND ACADEMIC PROBATION

If a student is placed on academic probation eligibility to receive financial aid will be affected. For more information, please contact: VHS-finaid@odu.edu

ATTENDANCE

Once the semester begins, the students will be notified of new course openings. It is a requirement for all distance students to log into their new courses during the first week of the course. Information about the course schedule, such as start and stop dates, is available in this handbook (Program Schedule), the RCS-MS Orientation Course, and the RCS-MS Class Calendar. Failure to log into a course and miss important deadlines may lead to withdrawal from a course.

ONLINE PROCEDURES

This section includes the Course Policies and Procedures that explain how different aspects of online courses are handled.

EXAMINATION PROCEDURE

Examinations and quizzes will be taken using Examplify software that will be provided to you. Due to the differing time zones, specific time slots will be allocated for each online assessment based on Eastern Standard Time (EST). Each instructor may vary the exam format (e.g., multiple-choice questions, short answer, or essay). Your exams may be timed with a limit of 1-3 hours or take home with a limit of 2-4 days. You will be notified in advance of the examination dates and format. Please refer to individual course sites for detailed information.

You are never allowed to use lecture materials, online resources, reading materials, the instructor's notes, or your personal notes during examinations or quizzes unless otherwise indicated. You are also not allowed to ask anyone for help during an exam unless it is of a technical nature. Please contact Examsoft technical support by phone (866) 429-8889, website www.examsoft.com or email support@examsoft.com if you have difficulty with your computer or download/upload problems. For clarification of the format or procedural questions of any kind or in the case of an emergency, please contact Dr. Liang Yu at yul@odu.edu or (757) 446-8421.

Depending on the nature of the technical issue encountered while attempting to take a timed assessment follow this guideline: 1) cannot open your exam file, wait until the next business day and contact Dr. Liang Yu 2) your computer shuts down during an exam, quickly turn your computer back on. You should be allowed back into the exam after the computer boots up; 3) if you are not allowed back in contact the support numbers in the order listed at the start of the exam; 4) cannot upload your exam file, notify your program office course director and contact Examsoft.

If take-home exams are given, you will be given detailed instructions at the time the exam is released about what resources you should use during the take-home exam. Please be aware that you may not ask anyone for help in answering the questions unless it is of a technical, procedural, or clarifying nature. In this type of exam, you will be asked for a detailed bibliography, and the document will be checked for plagiarism electronically using Turnitin™ software by the student.

REVIEWING SECURE EXAMS

Because of the secure nature of the exams you will take, they will not be released to you for review. If you have questions or would like to discuss the items you may have answered incorrectly, you must set up a time with the appropriate Course Director to meet in online meeting rooms in the Canvas course site. This will allow you to review the items you missed and discuss any concerns you may have regarding the correct answers. If this does not resolve the issue, you must set up a time with the Program Director to meet in the course meeting space.

ASSIGNMENT PROCEDURE

The deadlines for submitting assignments will be posted on Canvas for each course. The assignment locations must be used for submission of all projects, reports, and papers—never email your assignments. Always submit your assignments in the format requested by the instructor, most typically MS Word; others will be specified. Also, always include your last name in the file name and put your full name on every page.

GRADES

Grades for assignments and exams will be posted in the Canvas course site within two weeks after the assessment or assignment deadline except where indicated or when unforeseen circumstances prevent such a timely release. Also, within a two-week period after the end of a course and, after the course survey or evaluation has been completed by all students, the course grades will be posted. If you have not received a grade for an assignment, exam or course within a two-week period, please contact the Course Director to report the problem. If you do not get a response, contact the Program Director, Yul@odu.edu .

COURSE SURVEYS AND EVALUATIONS

Course surveys in the form of an online survey program are released a few weeks before the end of the semester. Students will receive an email with a link to the survey for this course. Students are encouraged to render their opinions about each course they have taken. This will improve the quality of the program.

INSTRUCTOR RESPONSE TIME

Instructors normally check messages once per day and respond within 48 hours excluding weekends. Feedback on assignments is usually provided within two weeks of receipt. If there are any concerns about missed emails or no response, please contact the appropriate Course Director. For any further concern please contact the Program Director.

CLASS DEMEANOR

Students are expected to interact in a professional demeanor with classmates, faculty, and staff, be prompt in attending Internet meetings, be patient in online interactions, and follow through on their individual contributions to group assignments and discussions. Inappropriate language, dissension, or disruption will be removed from any web posting and disciplinary action may be take

EMAIL

Only your ODU email will be used for the duration of the program. Email may be sent from within Canvas, but it will use your ODU email account as the sending account. Information that you need to convey to the instructor or requests for an appointment are best sent via ODU email.

DISCUSSION BOARD

The Discussion Board, Wiki, Blogs and Journal Postings in Canvas are types of interactions where students and faculty can communicate with each other. Discussion Boards will be read by everyone in the class. Wiki assignments are typically group projects all members of the class will have access to, Blogs are similar to Discussion Boards where all class members will have access and Journal Postings are only available to you and your instructor. You will be responding to questions posted by the instructor, members of your group or each member of the class. All these types of assignments will typically have a grade associated with them. Please check to make sure you understand the timing of posts, how many posts, the types and depth of the post being requested so that you may get full credit for the assignment.

In a traditional classroom, students are reminded that behavior that disrupts the class or interferes with other students and their ability to learn is unacceptable. Any person engaged in disruptive behavior receives a written warning from the instructor. Students who continue to engage in disruptive behavior after this warning may be administratively withdrawn from the course. Similarly, in an online course, any electronic postings, emails, or electronic messages that disrupt the class or interfere with learning goals and objectives are unacceptable. Electronic communication—the backbone of online courses—must be civil, respectful, and cordial at all times. Any posting that disrupts or interferes with learning will be removed, and the author of the posting will receive a written warning. A second disruptive posting will be grounds for the author to be administratively withdrawn from the course.

All materials from lectures, discussion boards or any other "class forum" is confidential and cannot be shared in any social media sites or shared with anyone else outside of the VHS ODU system. Any concerns about the plagiarism, ethical or legal nature of any material should only be communicated with the related Instructor(s), Course and Program Director for assistance with the matter.

TROUBLESHOOTING

If you cannot log into Canvas, student portal , the Library or access your webmail, contact the IT Help Desk at 757-446- 7400 or ithelp@odu.edu and Dr. Liang Yu at yul@odu.edu. If this is an urgent issue after hours call the ACC number and ask for assistance. If you are having difficulty saving or submitting the exam email Dr. Liang Yu at yul@odu.edu or 757-446-8421 or contact ExamSoft support at 866-429-8889 or support@examsoft.com. After hours contact the on-call contact numbers in the order indicated at the beginning of the exam in the instruction window. If you have issues with any media, lectures, videos or recordings within the courses contact the Course Director and Dr. Liang Yu at yul@odu.edu.

GRADING POLICIES

TRANSFER CREDIT

Transfer of credit may be allowed for course work taken at a regionally accredited institution of higher learning, such as the Southern Association of Colleges and Schools, for courses in which a grade of B (3.0) or higher was received or a passing grade was achieved in a pass/fail course. The RCS master's programs may accept a maximum of 9 transfer credits. Course grades obtained from another institution will not be counted in the GPA. All applicants seeking to transfer credit(s) should contact the program for special application or credential requirements. Decisions regarding the applicability of transfer courses/credits will be made by the Program Directors in consultation with the faculty as deemed appropriate. Please contact the Distance Education (DE) office to enquire about the process: DEAdmin@odu.edu.

GRADING POLICY AND SCALE

This section specifies the general grading policies and procedures used by all of the health professions programs. In addition to the policies listed here, each program may have additional requirements that are communicated to students at the initiation of their first semester. Final grades at the end of each term are assigned according to the Macon & Joan Brock Virginia Health Sciences at Old Dominion University School of Health Professions grading scale.

Percentile	Letter Grade	
100-94	A	4.00
93-90	A-	3.67
89-87	B+	3.33
86-84	B	3.00
83-80	B-	2.67
79-77	C+	2.33
76-74	C	2.00
73-70	C-	1.67
69 or less	F	0.00

Grades not affecting GPA and applicable to our program will be noted as follows:
I = Incomplete
W = Official Withdrawal
WF = Unofficial Withdrawal

MAKE-UP POLICY

If you are unable to meet the time frame for submission of exams or other work, you must make prior arrangements with the Course Instructor or Course Director. If you have an emergency or urgent or technical issue and you are not able to contact the Course Director right away contact her/him as soon as possible to discuss how to get an excused absence for a delay in assignment or exam submission. Failure to do this will result in a zero grade for that test or assignment. It is important to post Discussion Board assignments in a timely manner because your classmates need your information and feedback to complete their assignments.

LATE ASSIGNMENTS

Assignments must be submitted on or before their due date. Macon & Joan Brock Virginia Health Sciences at Old Dominion University/Canvas server problems are not an excuse for late papers. If you are unable to log into student portal or Canvas you should contact the IT help desk ithelp@odu.edu, 757-446-7400, please copy Dr. Liang Yu to determine who will help remediate the technical issue: yul@odu.edu.

INCOMPLETE POLICY

When an instructor assigns a grade of "I," a written agreement is prepared and signed by the instructor and student that specifies the work remaining to be completed and the time frame for doing so. **The work should be completed as soon as possible, but not later than the mid-point of the following grading period/semester unless special written approval is granted by the Course Director and Program Director for extraordinary circumstances.** The student must petition the Course Director and the Program Director for such an extension at least two weeks before the end of the agreed-upon deadline. **Unless an extension has been approved by the Course Director and the Program Director, the "I" will convert to either an "F" or the grade as specified in the written agreement after the mid-point of the semester.** An "I" grade may not be changed to a "W" under any circumstances.

In the case of the RCS 713 Research Methods and Capstone/Thesis course at the end of Semester 6, if satisfactory work toward the completion of the Master's Project has been accomplished, the student will receive a grade for the course based on meeting deadlines for capstone/thesis project completion. If at the end of the term it is determined that adequate progress has not been made, the student will be given an "I". An incomplete form must be filled out and

signed by the Course Director, the student and the Program Director. This I grade does not expire the following semester as long as the student has been granted extensions to continue working on the capstone/thesis projects.

GRADE DISPUTE

To better understand how your grades were calculated, please carefully review the syllabus for the course. If it appears that the grade has not been calculated correctly please contact the Course Director to discuss your final grade in the course and to get clarification within one week after the end of the semester and final grades posting. If there is no resolution of the grade and further clarification is needed contact the Program Director to discuss the course grade and calculation or to review aspects of the course within one week of the appointment with the Course Director. If there is still further need to discuss the course, please contact the Dean of the School of Health Professions within three weeks of the end of the course and grades posting.

STUDENT PROGRESS

Student progress in this program is monitored at the individual course and semester levels. Progress is evaluated at the course level during and at the end of a course by the Course Director. If student performance falls below an acceptable level, the Course Director will issue a written warning which is sent to the student as well as to the Program Director. This warning should alert the student to problems that should be remedied immediately. Once a student has been issued a warning, they must contact the Program Director to discuss ways to remedy the situation. Communication between the Course Director, Program Director and the student will be established to discuss options. The Program Director will meet in the middle and at the end of each semester with individual Course Directors as needed to evaluate student progress at the course level. At the end of the semester, the students' GPAs will be evaluated by the Program Director. Since the students in the Reproductive Clinical Science Master's Program will be required to achieve a cumulative GPA of 3.00 or better to obtain a graduate degree, this standard must be met each semester.

ACADEMIC AND NON-ACADEMIC GRIEVANCE AND APPEAL PROCEDURES

Students in the School of Health Professions have the right to due process involving grievances and appeals:

The student should discuss the grievance with his or her Program Director. If the grievance is not resolved, a student may file a written appeal to the Dean of the School of Health Professions within seven days of the student's notification of the Program Director's decision. Upon receipt of the appeal, the Dean will notify the Registrar accordingly. The Dean or a designee will review all pertinent material and meet with the student. The Dean may convene a Grievance/Appeals Committee composed of Program Directors, faculty, students, and/or chairs of departments not directly involved in the grievance. All testimony, evidence, and witnesses relevant to the appeal shall be made available to this committee. The student has the right to appear before the committee, present testimony and such witnesses or evidence as is deemed relevant by the committee. The student shall not have the right to be represented by counsel at these committee meetings. The Committee will submit its recommendations to the Dean after the review is completed.

The Dean will notify the student within ten business days of his/her decision. The decision may include reinstatement, retention, probation, termination, suspension, special academic assignments, or other interventions deemed appropriate to the situation. The judgment of the Dean concerning the grievance shall be final and binding on all parties, with the exception of recommending the termination of a student's participation in an academic program.

In the case of termination from an academic program, the student may file a written appeal to the Macon & Joan Brock Virginia Health Sciences at Old Dominion University President/Provost within five business days of the student's notification from the Dean of the School of Health Professions. The President/Provost will review all pertinent material and notify the student within fifteen business days of receipt of the appeal of his/her decision. The decision of the President/Provost is final.

RCS-MS ACADEMIC STANDING, WARNING AND PROBATION

1. Students are considered to be in good academic standing if their term and cumulative GPA is 3.00 or greater.
2. If a student's term or cumulative GPA falls below 3.00, a written warning will be issued. Students who

Receive a warning must increase their cumulative GPA to 3.00 or higher by the completion of the following semester, or they will be placed on academic probation.

3. Students placed on academic probation must achieve a term GPA of 3.00 or higher by the following semester, or they will be subject to dismissal. Students on probation who achieve a term GPA of 3.00 or higher, but whose cumulative GPA is below 3.00, may remain on probation for one additional semester.
4. No student may remain on probation for more than two consecutive semesters. Any student who fails to attain a cumulative GPA of 3.00 or higher after two semesters of probation will be subject to dismissal from the program.
5. Students receiving a grade of C- or below in any course may be asked to retake the course, part of the course or any assignment associated with that course based on a decision by the Course and Program Director. Most courses are taught only once a year, which may mean taking the course or a part of the course with the following cohort of students.
6. Any student receiving the grade of a C- or below in two courses will be subject to dismissal from the program.
7. The Program will make every reasonable effort to notify students of their academic status. A letter is mailed to each student placed on academic warning, probation or dismissal. However, it is the responsibility of every student to monitor their academic progress, and to check with the Program Director if there are any questions about his or her academic status.
8. A student placed on academic warning or probation will be contacted by the Program Director to devise and discuss an academic improvement plan. This plan will be followed during the coming semester. If warning or probation continues, the Program Director and the student will meet to discuss and devise an additional plan until the student is removed from warning or probation or additional actions are taken as described above.

When a student is placed on academic probation, their eligibility to receive financial aid may be affected.

PROFESSIONALISM AND SCHOLARLY REQUIREMENTS

RCS-MS WRITING STYLE

This program uses the American Medical Association (AMA) Manual of Style formatting and citation for all assignments. If you have a question about formatting that you need help with that is not covered elsewhere, please consult the AMA Style Guide, 11th Edition. (http://www.amamanualofstyle.com/).

CAPSTONE/THESIS WRITING STYLE GUIDELINES

This RCS-MS style and format guideline should be followed to construct your capstone or thesis projects, which must be prepared to a professional standard. The final section of this guide includes a copy of the capstone/thesis template to aid you in formatting your final master's project; a file containing these templates are also available in the RMCT Course sites. As soon as your advisor, capstone/thesis Course Director or the writing tutor recommends, you should start using the template. If you have a question about formatting that you need help with that is not covered in the EVMS manual, please consult the AMA Style Guide, 11th Edition (http://www.amamanualofstyle.com/).

SHP STUDENT BEHAVIOR POLICY

All students in the EVMS School of Health Professions must meet high expectations for academic integrity. In addition to being required to maintain the guidelines outline for Monarch Citizenship through Honor Code, Honor Pledge, and Monarch Creed, students enrolled in the School of Health Professions must adhere to the Expectations for Health Professions Student Behavior Policy.

Students must adhere to both the SOM and SHP Expectations for Student Conduct Policy and the ODU Code of Student Conduct: https://ww1.odu.edu/about/policiesandprocedures/bov/bov1500/1530.

PLAGIARISM/ TURNITIN PROGRAM POLICY

Plagiarism can best be defined as stealing and passing off the ideas and/or exact words of another as your own. Unintentional plagiarism, where plagiarism is the result of ignorance, poor writing skills, or mistakes in writing up citations in early drafts, is forgivable.

Basically, if you submit a final draft to an instructor or a journal for publication with the words or ideas of another person consciously copied with or without citation, then you are guilty of plagiarism.

Thus, students in this program will be trained to:

- Understand proper ways to cite and use material from others' work.
- Know the differences between citation, quotation, and plagiarism
- Be able to use the program Turnitin™ to assess and correct unintentional plagiarism before submitting their final drafts.

GRADUATION REQUIREMENTS

LENGTH OF TIME TO COMPLETE THE MASTER'S DEGREE

It is expected that students in the Reproductive Clinical Science Master's Program will be able to complete their requirements in two (2) calendar years. If the student has not completed the degree requirements at the end of the standard two-year period and they anticipate non-completion by the 90-day post-graduation cutoff, the student must submit a written plan for completion of the outstanding requirements which is due by the third week in May of their graduation year. This petition must be approved by the student's advisor and the Program Director. While completing their requirements students must maintain continuous enrollment in the program. This process is started by registering for an additional course by the 3rd week in May of their original graduation year. All requirements for the Reproductive Clinical Science Master's Program must be completed within three (3) calendar years from the time the student is matriculated into the program. In unusual circumstances,

extensions may be granted by the Program Director.

GRADUATION

Macon & Joan Brock Virginia Health Sciences at Old Dominion University confers formal academic degrees at an annual graduation ceremony to students in degree-granting programs. All candidates for academic degrees who qualify during a given academic year will be graduated at this ceremony regardless of the actual completion date of the degree requirements. Students may participate in commencements while still completing requirements however, they will be presented with an empty diploma folder during the ceremony. The diploma will be sent after all degree requirements are completed. In order to participate in graduation, all degree requirements must be completed within 90 days after the date of graduation. The Program Director and the Capstone/Thesis Advisor must see that all requirements have been completed or that adequate progress has been made (including the master's project) one month prior to graduation, or the student will not be approved to attend commencements. The student must petition for approval to attend graduation one month prior in the third week of April if all requirements have not been met. (See appendices for appropriate forms).

The ceremony is conducted on the third Saturday in May. Caps and gowns for distance learning students are distributed the day before graduation at the mandatory practice session on the Friday before at Scope Auditorium. A line-up sheet will also be given to inform graduates of the order of procession. Assistance will be provided for any questions or concerns at the practice session.

Commencement exercises are part of a larger academic tradition. Commercial activity is incompatible with these exercises. Such activities are appropriately conducted during the rehearsal or at class banquets. Any public displays of graduation information and events must be approved by both the Macon & Joan Brock Virginia Health Sciences at Old Dominion University Chief Marshal and the Office of Institutional Advancement.

RCS-MS PROGRAM REQUIREMENTS

BROCK VIRGINIA HEALTH SCIENCES LABORATORY SAFETY AND ADDITIONAL TRAINING COURSES

Students working or otherwise participating in research at Brock Virginia Health Sciences must complete the General Laboratory Safety Courses given by the Brock Virginia Health Sciences Department of Environmental Health and Safety Services. The required courses will include:

- Lab safety training online course
- New Student Training
- Compliance
- HIPAA Course
- CITI Training
- Blood Borne Pathogens training

BROCK VIRGINIA HEALTH SCIENCES SCIENTIFIC MISCONDUCT POLICY

Students working or otherwise participating in research or clinical work must be familiar with and follow the EVMS Scientific Misconduct Guide. Additional copies of the guide are available from the office of research 757-446-8480.

BROCK VIRGINIA HEALTH SCIENCES STUDENT PUBLISHING POLICY

Authorization for publishing any or all of your capstone or thesis work as a meeting abstract, meeting poster, book chapter or article in a scientific journal must be sought from your Capstone or Thesis Advisor(s) and the Program Director. All capstone or thesis work done as part of the requirements of completing the Masters in Reproductive Clinical Science must be attributed to Brock Virginia Health Sciences, your advisor and your local institution. Additional details about student publishing procedures will be posted in the Research Methods Capstone/Thesis Course.

CURRICULUM

The Program Schedule/Calendar included in an appendix in this handbook is color-coded, listed by name, course number, course director, number of weeks, and number of credit hours. Important dates are indicated, such as residential course dates for the first and second year as well as graduation dates. Holiday breaks are indicated in red. A summary table of the Curriculum is also included.

The curriculum for the Reproductive Clinical Science Master's Program has been constructed with the input from the Course and Program Directors. The curriculum is designed to meet the needs of the Clinical Embryologists and/or Andrologists to deepen basic knowledge to better understand the basic science behind IVF procedures. Another aspect of the program is to impart best practices for the IVF laboratory with special emphasis on design, workflow, QC/QA, CLIA 88 and current FDA regulations. Of paramount importance within the curriculum, is the constant thread of ethical concerns and patient rights.

The 24-month multidisciplinary course of study provides coursework, research development and internship opportunities that give the students general and specialized biomedical sciences training. The program is designed to be completed in six semesters (2 summer and 4 routine Fall and Spring semesters) at an average of three courses per semester for a total of sixteen online courses (36credits) additional courses in hands-on IVF and Andrology training/internship minimum of 3 additional credit hours arranged in the final semester.

- RCS-700 | Biochemistry & Molecular Cell Biology (2 Credits)
- RCS-701 | Introductory IVF Laboratory Tech & Skills Development (3 Credits)
- RCS-702 | Molecular Biology & Genetics (3 Credits)
- RCS-703 | Female Reproductive Endocrinology & Infertility (3 Credits)
- RCS-704 | Current Topics in IVF – Journal Club (1 Credit)
- RCS-705 | In Vitro Fertilization Technology (3 Credits)
- RCS-706 | Gametes & Embryos (3 Credits)
- RCS-707 | Research Methods Capstone Thesis: Project & Statistics (2 Credits)
- RCS-708 | Advanced IVF, Laboratory Tech & Skills Development (2 Credits)
- RCS-709 | Research Methods Capstone Thesis: Project Proposal (1 Credit)
- RCS-710 | Genetics of Reproduction & Infertility (3 Credits)
- RCS-711 | Research Methods Capstone Thesis: Master's Project (1 Credit)
- RCS-712 | Male Reproductive Function & Dysfunction (3 Credits)
- RCS-713 | Research Methods Capstone Thesis: Scientific Writing (3 Credits)
- RCS-714 | Cryopreservation (2 Credits)
- RCS-715 | Ethics, Society & ART (1 Credit)
- RCS-768 | IVF Clinical Internship* (3 Credits)

Students complete coursework and interact with instructors and classmates through a distance education format utilizing the Canvas Learning Management System and are required to attend two 5-day Residential Courses at the Virginia Health Science (VHS) campus. The first of these on-campus sessions is the 10th week of the summer session of the first year. Students with no experience in various aspects of Assisted Reproductive Technologies (ART) are required to arrive one day earlier for basic training in ART. You will be notified in advance if you need to attend this early session. The second residential week will be in the second year in June. Upon successful completion of the program, students are awarded the Masters of Science (MS) in Reproductive Clinical Science.

Please note that all policies and procedures within the Student Handbook are subject to change. Changes will be communicated to students as soon as possible.

COURSE DESCRIPTIONS

BIOCHEMISTRY & MOLECULAR CELL BIOLOGY

This course presents the basic principles of cellular structure and function, which are the infrastructure for understanding clinical endocrinology and embryo metabolism. This 4-module course examines the structure of biological components and their roles in biochemical processes- metabolism, molecular feedback through hormones, signal transduction, cellular physiology and molecular biology. Case study discussion boards and current journal article discussions connect the basic science content to IVF.

INTRODUCTORY IVF LABORATORY TECH AND SKILLS DEVELOPMENT

Laboratory science and technology are at the foundation of the Clinical Embryology Laboratory, and ART success rates are largely dependent on the quality of the laboratory environment and the knowledge and skill of laboratory personnel. This course covers the basic laboratory skills and techniques used in the IVF and andrology laboratories. A required, on-campus component includes hands- on training and skills evaluation.

MOLECULAR BIOLOGY & GENETICS

This course includes an introduction to molecular biology with an emphasis on the structure and function of both DNA and RNA and their roles in protein synthesis. Aspects of gene structure-function and regulation will also be discussed in this course including a section on mitochondrial DNA. Research in this area includes the use of molecular techniques which will be illustrated. This course also provides instruction in the fundamentals of human cytogenetics, with discussions of chromosomal structure, cell division, as well as both genetic and epigenetic mechanisms of inheritance and different types of mutations and aneuploidies. This course will also introduce basic molecular biological techniques that are used in current molecular biological research including DNA, RNA isolation and analysis, protein isolation and analysis, genetic engineering, cloning and sequencing, gene expression analysis, PCR, quantitative real-time RCR.

FEMALE REPRODUCTIVE ENDOCRINOLOGY AND INFERTILITY

This course provides an introduction to endocrinology, female reproductive anatomy and the latest information in basic reproductive physiology of the female at all life stages, including puberty, mid-reproductive life and menopause. Chronic reproductive abnormalities will be discussed in detail using the current literature, including hypothalamic amenorrhea, polycystic ovarian syndrome and premature menopause. The role of gonadotropin hormone therapy in ovulation induction and controlled ovarian stimulation along with complications, such as ovarian hyperstimulation and multiple births, will also be discussed. The use of agonists and antagonists in ART and stimulation protocols for difficult cases, such as the poor responder and hyper-responder, will be covered along with donor egg and surrogacy and ethics.

CURRENT TOPICS IN IVF

This course is a journal club format designed to give basic instruction for reading the literature as students prepare to take courses in the following semesters that depend on journal articles as a supplement to or the sole source of reading. Another purpose for this course is to introduce current topics in IVF prior to the Master's Project topic selection in the second semester. The students will work in groups to present papers selected by the program faculty. The online meeting format will be used to present and record the sessions. These sessions can be attended synchronously or asynchronously. Discussion boards will also be used to review and critique the presentations.

IN VITRO FERTILIZATION TECHNOLOGY

In vitro fertilization has given its name to the field of reproductive medicine. This course presents a historical overview of the field of IVF and all current techniques and regulatory issues including how to collect, recover, assess, prepare, fertilize and maintain gametes and embryos; the basic protocols for IVF, ICSI, GIFT, ZIFT, TET and ET: the types of culture media and culture systems used in IVF; how to design and maintain a quality IVF laboratory; the principles and application of Quality Assurance (QC, proficiency testing) and laboratory safety (security, fire, electrical, patient issues, staff issues); the operation and maintenance of common lab equipment, recordkeeping, personnel issues and standards of good practice; how to troubleshoot problems that may arise in the IVF lab; and topical subjects, such as derivation of embryo stem cells from blastocysts and cloning. Assigned asynchronous discussions with faculty and students connect students with current topics allowing them to present their own experiences and to review the current literature for changes in the field.

GAMETES AND EMBRYOS

The objective of this course is to present the recent understanding of the development of gametes and embryos to connect the participants with the molecular principles behind IVF laboratory practice. Using the historic and current literature, this course covers the molecular aspects of the origin of germ cells, oogenesis, spermatogenesis, meiosis, fertilization and preimplantation, development, implantation of embryos, gamete pathology and aging. The students are taught how to evaluate a current journal article and write a research paper to discuss their findings.

RESEARCH METHODS AND CAPSTONE/THESIS: PROJECT & STATISTICS

Statistics and research study design are essential tools in any scientific endeavor. Developing a thesis research study design and understanding the background literature needed to create a capstone review or practice improvement project requires a rudimentary knowledge of basic statistics. In the course, students will receive training in biostatistics, which is the study of statistics used in medical and basic biological research. Students will learn the fundamental

ADVANCED IVF, LABORATORY TECH AND SKILLS DEVELOPMENT

Laboratory science and technology are at the foundation of the Clinical Embryology Laboratory, and ART success rates are largely dependent on the quality of the laboratory environment and the knowledge and skill of laboratory personnel. This course covers advanced laboratory skills and techniques used in the IVF and andrology laboratories. A required, on-campus component includes hands-on training and skills evaluation.

GENETICS OF REPRODUCTION AND INFERTILITY

Many aspects of medicine, including reproductive medicine, may revolve around underlying genetic causes or predispositions. This course covers many important areas of genetics including the basis of sex determination with functional anomalies of the reproductive system, the origin of aneuploidy and other chromosomal abnormalities in oocytes, sperm and embryos, the epidemiology and genetic basis of pregnancy wastage, the current status of various preimplantation/prenatal genetic testing (PGT- A, PGT-M, PGT-SR) and its applications and the molecular techniques that are available for PGT. Current journal article critiques and various PGT design projects are used to connect with recent developments in the field.

MALE REPRODUCTIVE FUNCTION AND DYSFUNCTION

The emphasis of the course will be on the anatomy physiology and pathology of the male reproductive system in the context of evaluations for male infertility. Knowledge of reproductive function by reviewing recent discoveries about the physiology and dysfunction of the male reproductive system will be presented using current articles and techniques. Relevant areas include: normal and abnormal spermatogenesis, reviewing slides prepared from testicular biopsies, basic semen analysis, standard tests of sperm function using microscopy and specialized functional and “non-functional” sperm evaluating assays. Also covered are disorders like testicular cancer, benign and malignant prostate and genetic causes of male infertility, male contraception and gender pre-selection using sperm. Additionally, students will be challenged with the evaluation of case studies in andrology and review of articles published in peer-reviewed journals.

CRYOPRESERVATION

The goals of cryopreservation are to preserve viable gametes, embryos, tissues and even whole organs for future fertility options and to enable augmented pregnancy rates for IVF. In this course, the biological effects of cooling and freezing will be covered in detail. Additionally, the discussion will include the following: principles of cryopreservation using conventional, equilibrium cooling methods, vitrification as an alternative to conventional freeze-thawing, applications and adaptations of low-temperature banking for different cell and tissue type as well as safeguards for quality assurance. Assigned asynchronous discussion groups between faculty and students are used to have students present their own experience in the lab or to review current literature to discuss recent changes in techniques.

ETHICS, SOCIETY, LAW AND ART

The objective of this course is to provide the student with a historical background of various traditional beliefs about reproduction, as well as the comments of moral theologians, ethicists, philosophers, sociologists, and others, about these same beliefs. The student will gain considerable understanding to be prepared to discuss these sensitive subjects with patients. Specifically, the course will provide a limited amount of background material but will refer the student to original sources, as well as to selected commentaries. At the practical level, the student will be presented with clinical case histories and he or she will be expected to discuss the pros and cons of each case and offer a realistic resolution to the ethical or moral dilemma. Grades in this course will be determined by the students’

evaluation of these case studies and a take-home exam.

IVF CLINICAL INTERNSHIP

During the second year of the program, those entering with no or limited experience will be placed in internships at various clinics and the EVMS training facility. These experiences will give students additional hands-on skills in andrology and embryology that will broaden their knowledge in best practices in the field of IVF.

RESEARCH METHODS CAPSTONE/THESIS: PROJECT & PROJECT WRITING

The master's project must be an original project of scholarship or research on a relevant topic in reproductive biology or medicine resulting in a paper. Students select either the review, QC/QI or research track. In all cases, an EVMS and possibly local advisors are selected to help determine the proper approach to the project. Depending on the track selected, a detailed capstone research or QC/QI study design is developed. To aid in capstone writing, a section of the courses has been developed to give the students an outline of the steps for writing their project. Basic elements of the capstone project for the three different tracks are covered: development of a thesis statement, data commentary, introduction, background, discussion and conclusion; specific to the research thesis, materials/methods and results. A major concern in publication today is plagiarism. This topic is also covered in detail. All students in this program are required to take IRB, bloodborne pathogens and HIPAA for research training during this course.

PROFESSIONAL SOCIETIES

SOCIETY OF ASSISTED REPRODUCTIVE TECHNOLOGY (SART)

SART is the primary organization of professionals dedicated to the practice of assisted reproductive technologies (ART) in the United States. ART includes the practice of In Vitro Fertilization (IVF). The mission of our organization is to set up and help maintain the standards for ART in an effort to better serve our members and our patients.

One of the most important functions of our site is to help patients locate and contact infertility clinics and view national and individual clinic IVF success rates.

AMERICAN SOCIETY FOR REPRODUCTIVE MEDICINE (ASRM)

The Vision of the American Society for Reproductive Medicine (ASRM) is to be the nationally and internationally recognized leader for multidisciplinary information, education, advocacy and standards in the field of reproductive medicine. The ASRM is a non-profit organization whose members must demonstrate the high ethical principles of the medical profession, evince an interest in infertility, reproductive medicine and biology, and adhere to the objectives of the Society.

AMERICAN ASSOCIATION OF BIOANALYSTS (AAB)

American Association of Bioanalysts is a national professional association whose members are clinical laboratory directors, owners, supervisors, managers, medical technologists, medical laboratory technicians, physician office laboratory technicians and phlebotomists. AAB also has three specialized membership sections for laboratory professionals: The College of Reproductive Biology (CRB), the Environmental Biology and Public Health Section (EBPH) and the National Independent Laboratory Association (NILA).

AAB is committed to the pursuit of excellence in clinical laboratory services by enhancing the professional skills of each of its members; promoting more efficient and productive operations; offering external quality control programs; collaborating with other professional associations and government agencies; promoting safe laboratory practices; and educating legislators, regulators, and the general public about clinical laboratory tests and procedures.

FAQS

How many students are accepted each year?

►►20 to 25.

Is this program geared toward professionals?

►►The program is designed for clinical embryologists and andrologists, physicians, and others involved in the practice of assisted reproductive technologies (ART).

Is this program accredited?

►►Eastern Virginia Medical School is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award master's degrees, doctoral degrees, and certificates in medicine and the health professions.

Are the courses conducted in a university in addition to the online program?

►►The program is completely online except for two 5 to 6-day residential courses held on VHS campus.

What are the methods employed to deliver distance learning?

►►Courses are taught by experienced basic science and clinical faculty using the Canvas learning platform. Lectures are typically either streamed or voiced-over PowerPoint presentations.

How much time is required to participate?

►►We estimate that you will need to dedicate at least 10 to 15 hours every week to reviewing lecture materials, reading textbooks and working on projects.

Is the program available to students outside of the United States?

►►Please contact the program coordinator, Tricia Lazatin at LazatiTB@odu.edu or 757-446-7935.

Will the ILETS score be acceptable instead of TOEFL?

►►Yes.

I have not passed the TOEFL but have passed the ECFMG exam. Is this accepted?

►►No, they are not interchangeable. You must pass either the TOEFL or the ILETS to be admitted to VHS.

What is the tuition payment schedule?

►►Tuition is due prior to the beginning of each semester. Invoices will be emailed from the VHS Finance Office (Accounts Receivable) about 1 month before the start of the summer session.

Is financial aid available?

►►Yes.

Are scholarships available?

►►Not at this time.

Is there any discount for former fellows?

►►No.

Is there a Ph.D. in Reproductive Clinical Science at EVMS?

►►EVMS does offer a distance Ph.D. program in Reproductive Clinical Science.

Would a Bachelor of Science in Nursing and four years of experience as an IVF/infertility nurse be acceptable for entry?

►►Yes.

APPENDICES

STUDENT CHECKLIST
Reproductive Clinical Science Master's Program

STUDENT INFORMATION	
Name:	Start date:
SEMESTER ONE: YEAR 1	
☐ Review RCS-MS Handbook ☐ Attend Residential Course – Year 1	☐ Biochemistry & Molecular Cell Biology ☐ Intro IVF, Lab Tech & Skills Development
SEMESTER TWO: YEAR 1	
☐ Complete Semester 2 Online Registration ☐ Complete Semester 2 Coursework	☐ Molecular Biology & Genetics ☐ Female Reproductive Endocrinology & Infertility ☐ Current Topics in IVF - Journal Club
SEMESTER THREE: YEAR 1	
☐ Complete Semester 3 Online Registration ☐ Complete Semester 3 Coursework	☐ In Vitro Fertilization Technology ☐ Gametes & Embryos ☐ Research Methods Capstone/Thesis: Project and Statistics
☐ Select & Get Authorization for Master's Project Topic and Track.	
☐ Master's Project Mentor appointed/selected	Name of Mentor
☐ Complete Track Selection Master's Project Topic Form	
SEMESTER FOUR: YEAR 2	
☐ Complete Semester 4 Online Registration ☐ Complete Semester 4 Coursework	☐ Advanced IVF, Lab Tech & Skills Development ☐ Research Methods Capstone/Thesis: Master's Project Proposal
RESIDENTIAL COURSE 2	
☐ Attend Residential Course – Year 2 ☐ Give Master's Project Presentation at Residential Course and Complete Master's Project Presentation Form ☐ Internship Track Student Meeting ☐ Complete Graduation Information Survey Form	
☐ Master's Research & QA/QI Project Track: Develop detailed research project study design	

SEMESTER FOUR: YEAR 2 - Continued	
☐ Master's Capstone Project Track	☐ Outline
SEMESTER FIVE: YEAR 2	
☐ Complete Semester 5 Online Registration ☐ Complete Semester 5 Coursework	☐ Genetics of Reproduction & Infertility ☐ Research Methods Capstone Thesis: Master's Project ☐ Male Reproduction Function & Dysfunction
☐ Submit & Obtain Approval for Capstone	☐ Section Drafts
☐ Research or QA/QI Apply for IRB Approval	☐ Local IRB Approval
SEMESTER SIX: YEAR 2	
☐ Complete Semester 6 Online Registration ☐ Complete Semester 6 Coursework ☐ Submit Intent to Graduate Form	☐ Research Methods Capstone Thesis ☐ Cryopreservation ☐ Ethics, Society & ART ☐ IVF Clinical Internship* Track Specific Course or Arranged Internship Required
☐ Finalize Capstone or Thesis (Approved by Program Directors)	
☐ Submit Capstone or Thesis ☐ Defend Capstone or Thesis Recorded Presentation	
☐ Certification for Graduation Form	☐ Online Graduation Information Form

TRACK AND MASTER'S TOPIC SELECTION FORM
Reproductive Clinical Science Master's Program

Student Name		Student ID #	

Track From List Below

Master's Project Tracks:
1. Research Thesis
2. Capstone Track Review
3. Capstone Track QA/AI

Project Topic

Approved By		Date
Student Signature		
Program Director Signature		

Decision	
☐ Approved	☐ Rejected
☐ Approved with modifications	☐ Deferred

- This form will be posted in the RMCT Project Course site in April to fill out and submit for approval.

RESULTS OF MASTER'S PROJECT PROPOSAL PRESENTATION
Reproductive Clinical Science Master's Program

This is to certify that on _____, _____,
(Date) (Student Name)
who is enrolled in the Master of Biomedical Sciences: Reproductive Clinical Science- Embryology & Andrology Program, has
_____ the requirements checked below.
(Passed / Failed / Completed / Approved)

DESIGNATED REQUIREMENTS
☐ **Master's Project Topic**
☐ **Master's Project Proposal**
☒ **Coursework**
Residential Courses

SIGNATURES		Date
Program Director Signature		
Master's Project Advisor Signature		

Master's Project Topic

Remarks

REQUIREMENTS HAVE NOT BEEN MET
Petition to Attend Graduation or Graduate With Your Cohort
Reproductive Clinical Science Master's Program

This form must be completed and returned one month prior to graduation (the third week in April). This form is required by all graduates who have not completed all degree requirements but would like to attend graduation or would like to officially graduate in the academic year under which you entered the program, (i.e. Class of 2022). Not only must the form be filled out and signed by you, you must email and obtain the appropriate signatures for approval to attend graduation as indicated below.

By completing this form and signing it, you are indicating that your Master's Project will be completed, as well as any outstanding requirements, by the end of the third week of August of your graduation year. Any others signing this form must agree that you will likely finish within the 90-day post-graduation cutoff.

If you will not be able to complete the requirements within the 90-day cutoff you will receive further instructions from the program directors.

Student Name		Student ID #	
Student Signature		Date	

List of Requirements Not Met

SIGNATURES		Date
Master's Project Advisor		
Course Director		
Program Director		

INTENT TO GRADUATE
Reproductive Clinical Science Master's Program

This form indicates that the student intends to complete all RCS Master's Degree Requirements by the second Monday in May of your graduation year. This form must be turned in one month before graduation which is the third Saturday each year.

Student Name		Student ID #	
Date			

Permanent Address					
Street Address					
City		State		Zip	
Telephone		Telephone			
EVMS Email		Personal Email			

Student Signature

MASTER'S PROJECT ACCEPTANCE AND PROCESSING
Reproductive Clinical Science Master's Program

PART A			
Student Name		Student ID #	
Date			

This is to certify the above-named student has submitted his/her thesis and that it has been accepted by the committee as satisfactory.

Masters' Project Title

Authorization Signatures		Date
Project Advisor		
Program Director		

Document Processing	
☐ Checked for proper formatting	Date:
☐ Sent to library for upload to electronic database	Date:

- This form will be filled out during your final semester and submitted with the final draft of your project.

M.S. in Reproductive Clinical Science Program
Certification for Graduation

This form will be completed and submitted by the Program Administrator; after student evaluation and signature are obtained the student will be allowed to graduate.
To be completed by RCS-MS Office

Name: _____
Last Name First Name Middle Initial

Student ID #: _____

Entry Year _____ Track _____

Degree Option ☐ Research Thesis ☐ Capstone

Indicate the status of the following:

	Pending	Completed	Not Applicable
Master's Project Presentation			
Final GPA			
Graduation			
Master's Project For Printing			
Total Hours Needed for the Degree		36/39	

Please check all of the required courses that must be completed prior to graduation:

☐	Course No	Course Name	Credit Hours
☐	RCS-700	Biochemistry & Molecular Cell Biology	2
☐	RCS-701	Intro IVF, Laboratory Tech & Skills Development	3
☐	RCS-702	Molecular Biology & Genetics	3
☐	RCS-703	Female Reproductive Endocrinology & Infertility	3
☐	RCS-704	Current Topics in IVF – Journal Club	1
☐	RCS-705	In Vitro Fertilization Technology	3
☐	RCS-706	Gametes & Embryos	3
☐	RCS-707	Research Methods Capstone Thesis Project and Statistics	2
☐	RCS-708	Advanced IVF, Lab Tech & Skills Development	2
☐	RCS-709	Research Methods Capstone Thesis Project Proposal	1
☐	RCS-710	Genetics of Reproduction & Infertility	3
☐	RCS-711	Research Methods Capstone Thesis Master's Project	1
☐	RCS-712	Male Reproductive Function & Dysfunction	3
☐	RCS-713	Research Methods Capstone Thesis: Scientific Writing	3
☐	RCS-714	Cryopreservation	2
☐	RCS-715	Ethics, Society & ART	1
☐	RCS-768	IVF Clinical Internship* Track Specific Requirement	3
TOTAL CREDIT HOURS			36/39

Upon completion of the above, this student will have completed all requirements for the Master's degree.

Program Director Date

2025-2026 MRCS YEAR 1 AND YEAR 2
PROGRAM SCHEDULE

Class of 2027	
2025-2026 Academic Year	
Orientation	
Semester One - Summer	
Start Date:	5/12/2025
End Date:	8/1/2025
Residential Week 1	7/13/2025 (novices) 7/14/2025 to 7/18/2025
Semester Two – Fall	
Start Date:	8/23/2025
End Date	12/12/2025
Semester Three - Spring	
Start Date	1/20/2026
End Date	5/13/2026
Class of 2026 2025 - 2026 Academic Year	
Semester Four - Summer	
Start Date	5/12/2025
End Date	8/1/2025
Residential Week 2	6/15/2025 to 6/20/2025
Semester Five - Fall	
Start Date	8/23/2025
End Date	12/12/2025
Semester Six – Spring	
Start Date	1/20/2026
End Date	5/13/2026
Graduation Rehearsal	5/15/2026-5/16/2026
Graduation	5/16/2026
Holidays and Breaks	
2025	
Memorial Day	5/26/2025
Juneteenth (Observed)	6/19/2025
Fourth of July	7/4/2025
Labor Day	9/1/2025
Fall Break	10/11/2025-10/14/2025
Thanksgiving Break	11/26/2025 – 11/30/2025
2026	
Martin Luther King Jr. Day	1/17/2026-1/19/2026
Spring Break	3/16/2026-3/21/2026
Memorial Day	5/25/2026
Juneteenth (Observed)	6/19/2026
Fourth of July	7/3/2026
Labor Day	9/7/2026

RCS-MS PROGRAM CURRICULUM

Course	Course Name	Course Manager	Credit
Semester 1: SUMMER			
RCS-700	Biochemistry & Molecular Cell Biology	Eva Forgacs-Lonart, PhD	2
RCS-701	Intro IVF, Lab Tech & Skills Development	Minglei Bian, PhD; Jacob Shuman, MS	3
		Credit Hours	5
Semester 2: FALL			
RCS-702	Molecular Biology & Genetics	Eva Forgacs-Lonart, PhD	3
RCS-703	Female Reproductive Endocrinology & Infertility	Silvina Bocca M.D., PhD, HCLD (ABB); Liang Yu, PhD	3
RCS-704	Current Topics in IVF – Journal Club	Minglei Bian, PhD; Jacob Shuman, MS	1
		Credit Hours	7
Semester 3: SPRING			
RCS-705	In Vitro Fertilization Technology	Minglei Bian, PhD; Jacob Shuman, MS	3
RCS-706	Gametes & Embryos	Hang Yin, PhD, HCLD (ABB)	3
RCS-707	Research Methods Capstone Thesis: Project & Statistics	Minglei Bian, PhD	2
		Credit Hours	8
Semester 4: SUMMER			
RCS-708	Advanced IVF, Lab Tech & Skills Development	Minglei Bian, PhD; Jacob Shuman, MS	2
RCS-709	Research Methods Capstone Thesis: Project Proposal Ret	Minglei Bian, PhD	1
		Credit Hours	3
Semester 5: FALL			
RCS-710	Genetics of Reproduction & Infertility	Hang Yin, PhD, HCLD (ABB)	3
RCS-711	Research Methods Capstone Thesis: Master's Project	Minglei Bian, PhD	1
RCS-712	Male Reproductive Function & Dysfunction	Mahmood S. Morshedi, PhD, HCLD (ABB), CTBS	3
		Credit Hours	7
Semester 6: SPRING			
RCS-713	Research Methods Capstone Thesis: Scientific Writing	Minglei Bian, PhD;	3
RCS-714	Cryopreservation	Mahmood S. Morshedi, PhD, HCLD (ABB), CTBS	2
RCS-715	Ethics, Society & ART	Liang Yu, PhD	1
RCS-768	IVF Clinical Internship*Track Specific Course or Arranged Internship	RCS Faculty	3
		Credit Hours	9
	TOTAL CREDIT HOURS		36 to 39